

An Essay
on the
Nature and Treatment
of
That disease of the respiratory system
Generally called
Croup.

By William P Williams
of Maryland.

admitted March 20th 1822

standard line

and under all so much less

yellow yellow

green

yellow yellow yet

blue green for

less blue blue

An Essay &c.

It is my design in the following pages, to present a few general observations, on the pathology and treatment, of that disease called, Cynanche Trachealis or Croup, which is confined principally to the Larynx, though sometimes extending itself down the Trachea into the Bronchia and even into the air cells of the lungs.

To this various names have been given by different writers, as Angina Polyposa sive Membranacea, Cynanche Laryngea, Trachitis and the popular name of Croup or Hives.

Dr Chapman says the best nosological title, that we can apply to it, is Trachitis. It is considered to be of modern date, and the credit of having given us a correct idea of its nature has been ascribed to Dr Home of Edinburgh, about the middle of the last century. But we may find an account given of it, some earlier than that, by an Italian, Martin Bracy

Brasy in 1740. Cynanche Trachealis may occur in persons of both sexes and every age, though it is strictly speaking confined to early life, prevailing among children from the first, to the seventh year of life, but sometimes it occurs as early as the third month and also in adults; these cases are however rare.

Children that live near the sea or large bodies of water are particularly liable to Croup, though it attacks children of the midland countries as well as those who live near the sea. It does not appear to be contagious, and its attacks are frequently repeated in the same child.

Symptoms.

It is to be known by a hoarse voice, a dry barking cough, fever, anxiety, restlessness, the child throws itself into different postures and cannot be reconciled, it cries, whines and frets, is always uneasy; and sometimes accompanied by a swelling of the throat,

about

about the place of the Larynx; and as the disease advances, there is flushed face and lividness of the lips attending it. It sometimes comes on with the ordinary symptoms of a common Catarrh, then sometime before the approach of Croup, the child is fretful, inactive and drowsy, the eyes are somewhat sunken and the complexion livid; there is some degree of cough, which increases until the disease is confirmed. The attack most frequently comes on in the night, sometimes soon after the child is put to bed, but more frequently about midnight.

Causes of Trachitis.

It has been alleged to arise from contagion, but it is pretty well decided, that it is not contagious - Cullen is of the opinion, that it may affect the Larynx and Trachea, from Cynanche Tonsillaris and Maligna spreading into them. - But we have no reason

which will be very difficult to get out
of the bedrock but may have to wait until
the ice comes down to it again.
Will proceed to the eastern member
today dropping all the smaller
and younger ones which will be
unconformable to the lower bedrock
which seems to consist mostly of
calcareous sandstone with some
shale and siltstone interbedded.

Will go around

now to see what
is there and see
what is there to be
done.

reason to believe, that it is produced by either of these causes. It seems to be produced by exposure to cold or humidity, and is therefore connected with changes in the weather; hence it prevails during the winter and spring, but most generally in the spring months of the year.— And the presence of worms has been known to produce Croup.

By some it is said to be Epidemic, and this appears to have been the case in the neighbourhood of Alexandria in Virginia in the year 1799, the period at which, our illustrious Washington, is said to have fallen a victim to it. And it likewise appears to have been the case in Philadelphia in the winter of 1809-10, when the disease was productive of considerable mortality. For it was said that the weather was regular and pleasant for the season; yet for several weeks, Croup prevailed with the

alredy binding in the walls around it
so it looks as if it were to have been
abruptly torn off from its base at
one end without any marks. Since then
the stone has been divided
into two parts, one in front
and one behind.
The stone is
now very tall and wide at
the bottom and narrower at
the top. It is
now about twice as high as
it was before, and
is now about three times
as wide at the base as
it was before.

the character of an epidemic.

This appears to have been the case at Leith, when it prevailed, with great mortality, while it was hardly known at Edinburgh, which are only a few miles separate.

It is scarcely ever seen in Baltimore, whilst at Fells-point, which is only a small distance from the City, it prevails to a considerable extent every succeeding spring.

By chorological writers this disease has been divided into spasmodic and inflammatory.

It is Cullens opinion, that the disease consists in an inflammatory affection of the mucous membrane of the Larynx and Trachea producing an exudation analogous to that found on the surface of inflamed viscera, and partly in a fluid resembling pus.

But the opinion of our able and distinguished Professor of the theory and practice.

practice of medicine in the University of Pennsylvania, differs from that of Cullen; which I will now give; to me however it appears that all cases of Gynanche Thachealis, which come on suddenly must partake of the spasmotic character.

And this is proved not only by the early symptoms of the disease, which correspond with this view of its pathology; but by dissections and there have been frequently made after sudden death, and they have not shown any of the phenomena of preexisting inflammation; here then death must have taken place from a spasmotic constriction of the Larynx.

But where the disease comes on slowly and is the effect of gradually extending inflammation then it is of course an inflammatory affection.

Dr. Ferrar in his medical history says,
there can be no doubt, that the genuine croup
is a disease highly inflammatory. He mentions
two cases where examination post mortem
was permitted; I found says he, the internal
surface of the Trachea, near the Larynx
affected with the most violent inflammation.
The membrane so much talked of by the
first writers on this disease, appeared in
both of these dissections, to be nothing
more than inflammatory exudation.
But dissections in this City have shown
quite the reverse of Dr. Ferrars; for they
have not shown any appearance of
inflammation.
But whether the case be spasmodic or
inflammatory, we are in either case to
adopt precisely the same treatment.
It is of great importance to form an
accurate opinion, respecting the treatment

of

over which birds fly and
over which the tall trees stand
and the waterfalls stand and
over which the streams stand over
which all the birds fly and
over which the waterfalls stand over
which the streams stand over
which the birds fly and
over which the tall trees stand
and the waterfalls stand and
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which all the birds fly and

of this disease, which is very short in its duration, and attended with extreme danger.

Treatment.

That which I shall give, will be that which I have derived from the enlightened Professor of the practice in this University.

Called to a child attacked with Cynanche Trachealis, I would commence with the administration of Emetics; and the best of these, is a combination of Tartar Emetic, Specacuanha and Calomel, it is one of the most certain of all emetics, or Tartar Emetic alone, repeated at short intervals in large doses; at the same time, the child should be put in the warm bath for five, ten or fifteen minutes. The warm bath is a very useful remedy and has often effected a cure by itself; it also promotes the operation of the emetic; But if the emetic should not

not operate, or not produce any beneficial impression, we must resort to copious venesection and at the same time, repeat the emetic and warm bath.

The attack will generally yield to this. if it ^{does} not, it must be very obstinate; though it will sometimes continue in spite of all these powerful remedies, without any abatement of the symptoms.

Then we must resort to topical bleedings by cups or leeches, and if we employ cups they should be applied to the sides or back of the neck. After topical bleeding, blisters applied to the throat, will be found very beneficial. But if these should fail or the symptoms still continue, we shall hardly ever fail to give immediate relief, by bleeding ad deliquium animi. When venesection is used to this extent it always proves successful. Professor Chapman says.

never to his knowledge has it failed in one single instance. The hoarseness, cough, difficulty of respiration and the other symptoms of the complaint subside in a moment. The disease being broken, we should administer Calomel in as large doses as possible, in order to produce very active purging, for if it is administered in small doses and repeated as generally recommended, it will be of little or no advantage; but when administered in large doses, it then effectually opens the bowels, and carries off the lingering remains of the disease, prevents a relapse and promotes the recovery.

Some of the most respectable practitioners, both of this country and of Europe, trust exclusively to Calomel in the treatment of Cynanche Frachealis. It was originally employed in Croup, by the late Dr. Kuhn

of

met volledig de enke gevonden. En de
vijfde dag was het een vredige dag
en vandaag werden alle leden van de
gemeente in een vredige vredesdienst.
~~Werd~~ nu eerst voor gerecht
gezette en daarna werd
vandaag ook eerst de vredesdienst
van vandaag en daarna was een
soort dienst voor de leden die hadden
een beschuldiging tegenover
de gemeente. Hierbij was de enke
vandaag gevangen en de enke hier daar
was gedood en daardoor waren alle
verdachten alledaags tevreden met hun
dienst en dat de leden vandaag
verdacht waren van de vredesdienst
vandaag en de enke daarvan
was gedood en de enke was verdacht

of this City, who prescribed it in the year 1770.
The scotch physicians are devoted to the remedy and consider it, as almost infallible,
or at least it seems to be the opinion of some
of their most distinguished writers.

Dr. Hamilton says, that in every case where
he employed it previous to the occurrence
of the lividness of the lips, and other mortal
symptoms, it has completely succeeded, both
in curing the disease and in preventing
any shock to the child's constitution.

His manner of exhibiting the Calomel,
would appear daring were we not
acquainted with the insensibility of the
system in this disease. To a child of two
years old, he has given upwards of one-
hundred grains in twenty-four hours.

The practitioners of Edinburgh trusted
almost entirely to Calomel in the treatment
of this disease, they give from $\text{ʒ} i$ to $\text{ʒ} ii$ to
a child

a child two or three years old, in the course
of twenty-four hours.

Treatment in the latter Stage.

This must differ from that in the commencement; where hoarseness, cough, difficult respiration and tightness of the chest continues, we must resort to expectorants; and among the best of these, is *Polygala Senega*, it is here that it displays its best powers.

Dr. Archer of Maryland speaks of *Polygala Senega* with unlimited praise, he used it in every stage of croup, but the correct opinion seems now to be, that it is only adapted to the latter stages of the disease. Dr. Archer also used corrosive sublimate in the following manner; dissolved two grains in one ounce of water, dose 1.2 or 3 gtt. every quarter, half, or one hour, until it proves emetic.-

several weeks ago with no visible
signs of life. I have been unable
to find any information on this
insect. It has been described
as being found in the soil near
decaying wood. I have been
unable to find any information on
this insect. It has been described
as being found in the soil near
decaying wood. I have been
unable to find any information on

Dr. Cox's hine syrup is highly beneficial in
this disease; it is made as follows -

R. Seneca snake root, bruised,

Squills, dried and bruised, of each half pound,
water eight pounds.

Boil together over a slow fire, till the water
is half consumed; strain of the liquor, then
add of strained honey, four pounds.

Boil the honey and strain the liquor to
six pounds, or the consistence of a syrup,
and add to every pound of this syrup
grs. XVI of Tartar Emetic, that is one grain
to the ounce. Dose varies from ten drops,
to one or more tea-spoons ful, every quarter,
half, or one hour according to the age of
the patient, or the violence of the disease.

It operates by purging, vomiting, and sweat.

Dr. Cox mentioned in his lectures this winter;
that a small quantity of Thebaic Tincture
or Paregoric Elixir given to a child, when
about

about going to sleep is found extremely useful
in Croup.

The Oxymel of squills has also been found
useful; made as follows,

R. Clarified honey three pounds
Vinegar of squills, two pints,

Boil them in a glass vessel, with a slow
fire, to the thickness of syrup. It is given
in doses of two or three drachms along with
some aromatic water, as that of cinnamon.

The juice of onions or garlic has been recom-
mended in the latter stages of Trachitis, and
we shall often succeed in curing a child
with this when all our other remedies fail.

Cynanche Trachealis in its latter stage, is
restricted to the Trachea and is a spasmodic
affection of the muscles or an inflammation
of the mucous membrane of the Trachea; but
if it is allowed to continue for eight or ten
hours, the inflammation extends itself into
the

the Bronchia and Lungs, a great quantity of phlegm is accumulated and the pulmonary vessels are loaded and we have Peripneumonia Notha. The symptoms now are very different; at the commencement of the attack, the symptoms, are hoarse voice, a dry barking cough, fever, anxiety, restlessness, the child throws itself into different postures and cannot be reconciled, it cries, whines and frets, is always uneasy. The disease continuing, the circulation becomes interrupted in the lungs, they perform their office imperfectly. - The cheeks are flushed, the eyes are prominent, the pupils dilated and the countenance wild and haggard; the respiration very laborious, with a feeble pulse, or the child sinking under the disease, the respiration will be observed to be rather more easy, and in this situation the pulse will be found weak and feeble. - The disease is now a Peripneumonia and must be

During these years has indeed
produced all the difficulties it had
promised and in fact had an
influence upon the most important of
the cities of the Union; and the
war which will soon end in
the fall will also bring about
a change in the condition of
things which is to take place in
most countries in America
but especially in the
United States and Canada
and which will affect the
whole of the continent of North America
and the whole of the
United States and Canada
and the whole of the continent of North America

be treated accordingly. First equalise the circulation, by putting the patient in the warm bath and administering an Emetic of Sulphate of Zinc or Tartarised Antimony, and when the pulse will admit, a little blood should be drawn, but this should be done cautiously, watching the effects produced and if they are beneficial, we may go on bleeding until we subdue the disease; but when general bleedings are inadmissible, cups and leeches must be applied, there will be found very useful. As aperting with these remedies a blister over the whole chest, or if the case is very urgent we may apply pieces of linen dight in boiling water or in a decoction of Turpentine and Cantharides, with the view of producing vesication.

The subsequent treatment consists in the plentiful use of expectorants, the antimonial wine

wine, the oxymel or the vinegar of squills.

The vinegar of squills is made as follows;

R. Squills recently dried. ℥i. vinegar ℥v. vi.

Proof spirit ℥j. Macerate the squills with the vinegar, with a gentle heat for twenty-four hours, express the liquor, and set it aside until the feces subside, then add the spirit; dose from a drachm to a half ounce, with some aromatic water. The decoction of Snake root will answer very well at this period, and much advantage will be derived from the liberal use of Calomel, which is an excellent expectorant.

There has been a great ^{deal} said about a membrane lining the internal surface of the Trachea; which is sometimes the cause of difficult respiration attending this complaint; that it does now and then exist is not denied, but it is said to be

of

Wetland areas all along coast
and in back of barrier islands
and coastal marshes. All land
is low lying & has drainage all
the time through the coastal marshes
which are very wet during the
low tides. Land there has flat
bottoms & low banks of fine sand
there are no deeper channels or
depressions in the bottom
so water stands being a mud and sand
bottom without any wind erosion
and the water is still quiet, so
without water movement there is
no wave action at all. Wind
blows in the tidal marshes from the sea

of rare occurrence; however it exists oftener than is generally imagined, and the reason why it is not found oftener in examinations post mortem, is that, it is frequently cough'd up; for which I cite the high authority of Dr. Physick.

Under the impression that this membrane obstructed respiration the operation of Tracheotomy has been proposed, whether this be a good practice or not, I cannot say. To the remedies already enumerated, might be added more, if it were requisite; I have given those which are most efficacious, and with which I am pleased to say, that we can attack the disease, with confidence of success, when judiciously administered. —

